Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently Amended) An isolated peptide comprising:

~~Tyr-Ser-Gly-Pro-Pro-Xaa$_1$-Xaa$_2$-Xaa$_3$-Arg-Arg-Xaa$_4$-Asn-Xaa$_5$-Tyr-Xaa$_6$ (SEQ ID NO: 1) wherein Xaa$_1$= Cys or Ser; Xaa$_2$= Ser or Gly; Xaa$_3$= Ser, Ala or Pro; Xaa$_4$=Arg or Gln; Xaa$_5$= Ser, Cys or Gly; and Xaa$_6$=Asp or Glu~~ Tyr-Ser-Gly-Pro-Pro-Ser-Gly-Ala-Arg-Arg-Arg-Asn-Cys-Tyr-Glu (SEQ ID NO:1);

wherein the isolated peptide does not include a basic helix-loop-helix (bHLH) domain;

wherein the isolated peptide binds cyclin dependent kinase 4.

2. (Canceled)

3. (Currently Amended) A fusion protein comprising:

(a) a peptide comprising ~~Tyr-Ser-Gly-Pro-Pro-Xaa$_1$-Xaa$_2$-Xaa$_3$-Arg-Arg-Xaa$_4$-Asn-Xaa$_5$-Tyr-Xaa$_6$ (SEQ ID NO: 1) wherein Xaa$_1$= Cys or Ser; Xaa$_2$= Ser or Gly; Xaa$_3$= Ser, Ala or Pro; Xaa$_4$=Arg or Gln; Xaa$_5$= Ser, Cys or Gly; and Xaa$_6$=Asp or Glu~~ Tyr-Ser-Gly-Pro-Pro-Ser-Gly-Ala-Arg-Arg-Arg-Asn-Cys-Tyr-Glu (SEQ ID NO:1), wherein the peptide binds cyclin dependent kinase 4; and

(b) a heterologous amino acid sequence.

4. (Original) The fusion protein of claim 3 wherein the heterologous amino acid sequence comprises a nuclear localization signal.

5. (Previously Presented) The fusion protein of claim 4 wherein the peptide is at the C-terminus of the fusion protein.

6-7. (Canceled)

8. (Withdrawn and Currently Amended) A method of inhibiting cell growth, comprising:

administering to a patient a CDK4 binding peptide comprising:

~~Tyr-Ser-Gly-Pro-Pro-Xaa$_1$-Xaa$_2$-Xaa$_3$-Arg-Arg-Xaa$_4$-Asn-Xaa$_5$-Tyr-Xaa$_6$ wherein Xaa$_1$= Cys or Ser; Xaa$_2$= Ser or Gly; Xaa$_3$= Ser, Ala or Pro; Xaa$_4$=Arg or Gln; Xaa$_5$= Ser, Cys or Gly; and Xaa$_6$=Asp or Glu~~ Tyr-Ser-Gly-Pro-Ser-Gly-Ala-Arg-Arg-Asn-Cys-Tyr-Glu (SEQ ID NO:1), wherein the peptide does not include a basic helix-loop-helix domain in an amount effective to inhibit cell growth.

9. (Withdrawn and Currently Amended) A method of inhibiting the activity of CDK4 comprising:

contacting CDK4 with a CDK4 binding peptide comprising:

~~Tyr-Ser-Gly-Pro-Pro-Xaa$_1$-Xaa$_2$-Xaa$_3$-Arg-Arg-Xaa$_4$-Asn-Xaa$_5$-Tyr-Xaa$_6$ wherein Xaa$_1$= Cys or Ser; Xaa$_2$= Ser or Gly; Xaa$_3$= Ser, Ala or Pro; Xaa$_4$=Arg or Gln; Xaa$_5$= Ser, Cys or Gly; and Xaa$_6$=Asp or Glu~~ Tyr-Ser-Gly-Pro-Ser-Gly-Ala-Arg-Arg-Asn-Cys-Tyr-Glu (SEQ ID NO:1), wherein the peptide does not include a basic helix-loop-helix domain in an amount effective to inhibit the activity of CDK4.

10-11. Cancelled.